

04-05-01

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PTO/SB/05 (11-00)

Approved for use through 10/31/2002 OMB 0651-0032

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**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. 65-104-1-19-28-7-3413

First Inventor Capasso

Title Technique for Measuring Intersubband Electroluminescence in a Quantum Cascade Laser

Express Mail Label No. EF172632415 US p

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)

2. ☐ Applicant claims small entity status  
See 37 CFR 1.27

3. ☒ Specification [Total Pages 11]  
(preferred arrangement set forth below)

- Descriptive title of the invention
- Cross Reference to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to sequence listing, a table, or a computer program listing appendix
- Background of the invention
- Brief Summary of the invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claim(s)
- Abstract of the Disclosure

4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 5]

5. ☒ Oath or Declaration [Total Pages 11]

a. ☒ Newly executed (original or copy)

b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)

i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application see 37 CFR 1.63(d)(2) and 1.133(b)

6. ☐ Application Data Sheet See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)

8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)

a. ☐ Computer Readable Form (CRF)

b. Specification Sequence Listing on

i. ☐ CD-ROM or CD-R (2 copies), or

ii. ☐ paper

c. ☐ Statements verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

1. ☒ Assignment Papers (cover sheet & document(s))

10. ☐ 37 CFR 3.73(b) Statement (when there is an assignee) ☒ Power of Attorney

11. ☐ English Translation Document (if applicable)

12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations

13. ☐ Preliminary Amendment

14. ☒ Return Receipt Postcard (MPEP 503) (Should be specifically itemized)

15. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)

16. ☐ Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i) Applicant must attach form PTO/SB/35 or its equivalent

17. ☐ Other

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment or in an Application Data Sheet under 37 CFR 1.76

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No. \_\_\_\_\_

Prior application information Examiner \_\_\_\_\_ Group Art Unit \_\_\_\_\_

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**

☐ Customer Number or Bar Code Label (Insert Customer No. or Attach bar code label here) or ☐ Correspondence address below

Name Wendy W. Koba, Esq.

Address PO Box 556

City Springtown State PA Zip Code 18081

Country United States of America Telephone 610-346-7112 Fax 610-346-8189

Name (Print/Type) Wendy W. Koba, Esq. Registration No. (Attorney/Agent) 30509

Signature Wendy W. Koba Date 4/4/01

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

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# FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT

(\$) 750.00

## Complete if Known

Application Number

Filing Date

First Named Inventor

Capasso

Examiner Name

Group Art Unit

Attorney Docket No

65-104-1-19-28-7-34-13

## METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to

Deposit  
Account  
Number

Lucent Technologies, Inc.

Deposit  
Account  
Name

12-2325

☐ Charge Any Additional Fee Required  
Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status  
See 37 CFR 1.27

2. ☐ Payment Enclosed:

☐ Check ☐ Credit card ☐ Money  
Order ☐ Other

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
101	710	201	355	Utility filing fee
106	320	206	160	Design filing fee
107	490	207	245	Plant filing fee
108	710	208	355	Reissue filing fee
114	150	214	75	Provisional filing fee

Fee Paid

710.00

SUBTOTAL (1) (\$)

## 2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
11	-20** = 0	X	0
2	-3** = 0	X	0
Multiple Dependent			0

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
103	18	203	9	Claims in excess of 20
102	80	202	40	Independent claims in excess of 3
104	270	204	135	Multiple dependent claim, if not paid
109	80	209	40	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

0

\*\*or number previously paid, if greater, For Reissues, see above

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

Fee Code	Large Entity Fee (\$)	Small Entity Fee (\$)	Fee Description	Fee Paid	
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	390	216	195	Extension for reply within second month	
117	890	217	445	Extension for reply within third month	
118	1,390	218	695	Extension for reply within fourth month	
128	1,890	228	945	Extension for reply within fifth month	
119	310	219	155	Notice of Appeal	
120	310	220	155	Filing a brief in support of an appeal	
121	270	221	135	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,240	241	620	Petition to revive - unintentional	
142	1,240	242	620	Utility issue fee (or reissue)	
143	440	243	220	Design issue fee	
144	600	244	300	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17(q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	40.00
146	710	246	355	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	710	249	355	For each additional invention to be examined (37 CFR § 1.129(b))	
179	710	279	355	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 40.00

## SUBMITTED BY

Name (Print/Type)

Wendy W. Koba, Esq.

Registration No  
(Attorney/Agent)

30509

Complete (if applicable)

Telephone

610-346-7112

Signature

Wendy W. Koba

Date

4/4/01

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

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IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

CASE Capasso 65-104-1-19-28-7-34-13

TITLE Technique for Measuring Intersubband  
Electroluminescence in a Quantum Cascade Laser

THE COMMISSIONER OF PATENTS AND TRADEMARKS  
WASHINGTON, D.C. 20231

SIR

Enclosed are the following papers related to the above-name application for patent:

Specification  
5 Informal sheet (s) of drawings  
1 Assignment-To be recorded  
Declaration and Power of Attorney  
Associate Power of Attorney  
Recordation Form Cover Sheet (2 copies)

CLAIMS AS FILED				
	No. Filed	No. Extra	Rate	Calculations
Total Claims	11 -20=	0	x \$18	0
Independent Claims	2 -3=	0	x \$80	0
Multiple Dependent, if applicable			x \$270	
BASIC FEE				\$710.00
TOTAL FEES				710.00

Please file the application and charge Lucent Technologies, Inc. Deposit Account No. 12-2325 the amount of \$ 710.00 to cover the filing fee for this application. In the event of any non-payment or improper payment of a required fee, the Commissioner is authorized to charge or credit Deposit Account No. 12-2325 as required to correct the error.

Please address all correspondence to Wendy W. Koba, P.O. Box 556, Springtown, PA 18081-0556. Telephone calls should be directed to Wendy W. Koba at 610-346-7112.

Respectfully,

*Wendy W. Koba*

Wendy W. Koba  
Reg. No. 30509  
Attorney for Applicant(s)  
610-346-7112

Date: 4/4/01